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ABSTRACT

As a contribution to the philosophical enquiry into the nature and forms of human activity, the hypothesis is ventured that "knowledge" relative to human movement and physical activities encapsulates and presents modes of perception, reflection, experience, and communication that are at least as important in human development as other generally more prized forms of knowledge. A person subsumes both intellectual and physical elements in his development; both of these are centrally involved in his experience and awareness of the world. Without experience of and instruction in the various modes of being and cognizing, no knowledge is possible in any extended sense. On this basis, human movement studies-physical education-must have a place in the curricula of educational institutions. Physical education, it seems, requires knowledge of mathematics, science, interpersonal relationships, history, politics, aesthetics, and ethics with all the peculiar sets of propositions, modes of procedure, and tests for truth, relevance, and appropriateness that are associated with each of these ways of knowing. In other words, physical education seems to be a field of knowledge which draws upon the insights available from a wide range of discrete disciplines in order to formulate answers to problems both of a theoretical and practical kind arising from the one central feature that draws its concerns together--the way in which the human person can develop his understanding of his life through the medium by which his existence is objectified, his body. (MM)

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AN UNNECESSARY DICHOTOMY IN PHYSICAL EDUCATION?

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'KNOWING HOW' AND 'KNOWING THAT' - AN UNNECESSARY DICHOTOMY IN PHYSICAL EDUCATION?

David Aspin

It is one of the commonplaces of educational discourse that the sort of activities in which proponents of 'education through the physical' typically engage are far from being of the same kind as those of which the curriculum in educational institutions of all sorts is normally composed. Not only do many teachers of other subjects think of them in terms of 'bodily' rather than 'intellectual' pre-occupations, as species of 'trained' patterns of movement rather than 'educated' mental dispositions, as providing not more than relief from the really hard work of the academic disciplines proper or therapy as a corrective to counter-productive or deficiency conditions to be found in pupils' environments and diets; but the work of many highly respected educational theoreticians also provides material which, in the highly sophisticated and tightly argued forms in which they present it, acts so as to reflect adversely on the claims of such activities for inclusion in educational curricula.

R.S. Peters, for example, compares and contrasts games with what he terms 'serious' curriculum activities.[1] As against such 'serious' theoretical activities as science, history, philosophy, and the rest, of games he avers that:

> there is a static quality about them in that they ... have either a natural or a conventional objective which can be attained in a limited number of ways ... Scratch golfers often get bored with the game because they have mastered it ... In so far as knowledge is involved in games ... this is limited to the hived off end of the activity which may be morally indifferent.

Thus, for Peters, games lack cognitive content; and such knowledge as they do possess is limited both in terms of content and the skills necessary to achieve its internal objectives. Above all, games are 'non-serious' in that they do not 'illuminate other areas of life and contribute much to the quality of living'. With them 'it is largely a matter of "knowing how" rather than "knowing that", of knack rather than understanding'.

The same point about the essential non-seriousness of games (as a species of 'play') is made by R.F. Dearden. His argument is that:

> play is 'non-serious', in the sense that it has no ethical value. What we play at is intrinsically unimportant. [2]

What there is in play is 'value-by-contrast'. It is, says Dearden, a relaxation, a refreshment, an enlivenment of the spirit. That it is so is because, he maintains, play is 'self-contained' - limited and confined not only to set times, places and occasions, but also by the immediacy and short-lived duration of the movements made within it. And these conditions, as his list of examples demonstrates, are of a procedural character.

The same distinction also lies at the root of the remarks made by one of the most recent writers on the logic of physical education activities. P. Renshaw argues [3] that the playing of games involves the making of moves of a restricted cognitive character. Given the ends aimed at, there are only, in principle at any rate, a limited number of moves one can make to achieve them - so, the number of ways and permitted strategies one may employ to score in football is not infinitely open. This emerges from a consideration of the nature of skills in general and enables Renshaw to build upon the distinction of 'skill' and 'cognitive understanding' and conclude:

> ... all skills, whether they be 'open' or 'closed', are essentially specific in nature. They contain their own internal cognitive content but their scope is limited ... Rules might be extended and the conception of a game might change over the course of time, but skills cannot generate new meanings as can the art form of dance and neither can they illuminate other activities.

On such grounds as these, criticisms have been formulated against the status and value of much of physical education that could, if unanswered, prove seriously debilitating to the continued provision of its activities on the curricula of educational institutions. This paper represents an attempt to provide some sort of answer, in terms of a <u>critique</u> of the grounds upon which such criticisms appear to be based.

II

It seems clear - particularly in the form in which it is articulated by Peters, for example - that such views as those adumbrated above presuppose acquaintance with and acceptance of the distinction postulated in epistemology between two types of knowledge - 'knowing how' and 'knowing that'. The thesis of a distinction between these two kinds is, of course, at least as old as Plato and has been a source of controversy ever since, though perhaps much less so since it was restated, perhaps in its sharpest form, by Ryle.

Ryle's major point, it will be remembered, [4] was that intelligent action is not a 'tandem' operation - a 'bit of theory followed by a bit of practice' - but that both covert and overt actions can be intelligent in themselves, insofar as the agent applies criteria to his performance, with a view to getting things right. His case against what he caricatures as 'the intellectualist legend' (according to which, as Ryle presents it, someone performing a skill demanding intelligence must 'run over the theory in his head' before he puts it into practice) is cogently conducted and skilfully argued. For one thing, he maintains, the practice of a skill successfully sometimes precedes the definition and elaboration of procedural prescriptions for it, and, in some other cases (as, for example, with wit), no procedural prescriptions can be formulated. As examples of all this Ryle instances aesthetic taste, tactful manners, inventive technique, pre-Aristotelian reasoning and pre-Izaak Walton fishing. His general point here is that the discovery of an action that is successful in achieving its purpose may actually precede or even defy an analysis of the critical qualities of such an action. His second argument is the logical one that adherence to the view that asserts the priority of propositional knowledge is either vacuous or absurd : the notion that knowing-how depends upon a prior act of knowing-that leads to petitio principii or reductio ad absurdum, for in seeking for the prior act of theory, one is already looking for an activity that can be carried on more or less skilfully. This latter would in turn require a further act of theorising; that would require a previous act of theorising, and so on ad infinitum - a vicious regress in which 'there would be nowhere for us ever to break into the circle'.

Ryle's conclusion is accordingly that there are two different kinds of knowledge - propositional and procedural - of which the natures are such that neither one can ever be reduced to the other. He denies that knowledge is an activity, an attainment, or some sort of 'mental' state but sees it rather as some sort of disposition to do or to act in various ways in certain circumstances. At the same time Ryle is careful to distinguish between what he calls the 'intelligent performances' which are characteristic of knowing-how - the complex multi-track dispositions called into play in the conducting of an argument, playing a game of chess, or making a soufflé - and the single track fixed dispositions which are 'habits'. As an example of these he instances his habit of smoking a pipe, each occasion of the performance of which is exactly like its predecessor.

Ryle's distinction of knowledge of propositions and knowledge as a skill is taken up and elaborated by Israel Scheffler.[5] Scheffler is sympathetic to the categorization of knowledge terminology on a dispositional account and accepts the thesis that knowledge can be differentiated into propositional and procedural. He notes Ryle's disjunction of practice-acquired behaviour into 'intelligent capacities' (to which Ryle restricts 'know-how') and 'habits' but he elaborates Ryle's thesis, in respect of the latter, by distinguishing between habits as 'propensities' and habits as 'facilities'. He concedes that 'propensities' - like Ryle's reference to his characteristic proneness to smoke in certain circumstances - are not cases of knowing-how; a habit such as smoking, or anything similar, clearly does not involve any 'intelligent' performance. By contrast, habitual 'facilities', by which Scheffler means what he calls the 'relatively routinizable competences' of drilling, double-declutching, spelling or walking, are in fact also cases, though of a different sort, of know-how. These, he claims, are 'closed' skills in which there are limits to the development, refinement and protraction of competence, and in which, eventually, little or no judgment is required. Scheffler goes on to make a contrast between such closed facilities and what he terms the 'open-ended' or critical skills, such as those called for in conducting a philosophical argument, driving a car over a journey, or performing a downhill ski-run, and which call for the constant application of the powers of observation, attention, judgment, modification and correction.

The difference between these two accounts of know-how seems to be largely one of usage. There is certainly something to be said for Scheffler's distinction of habits as facilities from the habitual propensity exhibited by the smoker. In any case, 'habit' is an odd word to apply to such initially open-ended activities as spelling, walking, doing multiplication, performing military drill or double-declutching. Moreover, once a desired level of competence has been reached - even in things like making a souffle, performing a downhill ski-run or even driving regularly over a known route at a certain time of day - it appears, on this argument, that even they - critical skills notwithstanding - can become relatively routine. Scheffler also makes another important distinction - that between mere competence (examples of intelligent performance which exemplify learned patterns of behaviour) and genius, presumably of the sort that we see in a Fischer, a Fangio, a Tourischeva or a Killy : for, he says,

> knowing how to do something is one thing, knowing how to do it well is, in general, another, and doing it brilliantly is still a third, which lies beyond the scope of know-how altogether, tied as the latter notion is to the concept of training.

Know-how is thus, in some sense, a continuum. It is not to be confused with an habitual or unreflective, unthinkingly-acquired pattern of predisposed behaviour such as that exemplified in taking out a pipe, sniffing, or clearing one's throat repeatedly during speech. It refers, rather, to patterns of movement and action (covert and overt) that at some stage require the bringing to bear of attention and directed effort. Some of these movements will tend to become routinised, such as the actual movements involved in changing gear; others will remain liable to constant change and adaptation, such as that involved in the whole series of moves required to drive a car from one place to another, changing gear and performing other routines en route. It is only the latter that involve the application of judgment and understanding. And it is only with the development of judgment and understanding that the activities of educators are generally thought to be concerned.[6]

III

According to Ryle, 'understanding' is not something different from, beyond or transcending knowledge: "Understanding", he remarks, "is a species of knowing how". To be sure, in order for a student to acquire such a skill, reference to a (separate) body of propositions, to a theory, may be - indeed, in some cases, he admits, necessarily must be - made. But what matters for Ryle and his followers is not the imputation, or otherwise, of theoretical operations on the subject's part, but the manner of his performance on one and a variety of other occasions in which the particular skill is called for or deployed. What is essential to Ryle's account for the possession of a skill lies in what he calls its dispositional character; that is to say, skill is said to be made manifest, knowledge or understanding exhibited, in certain particular circumstances, just as a glass is liable to break when struck. In other words, Ryle's analysis of knowing-how - or, come to that, of knowing-that - is that it is of an 'If X, then Y' character.

This feature of Ryle's account, coupled with his stress on the point that successful practice of a procedure precedes its specification in propositional terms, has led some to conclude that knowing-how is not only chronologically but also logically prior to knowing-that. So J. Hartland-Swann, [7] for example, attempts a reduction of knowing-that to knowing-how - specifically to 'how to make statements' or to 'how to reply appropriately to questions'. For this follows from the fact (if indeed it is a fact) that 'know' is a dispositional term, in which the attribution of knowledge of a propositional kind rests only upon the ability of the respondent to reply correctly (and hence to give an intelligent performance) to questions put to him to test it publicly. The only alternative to such an account would have to be, Hartland Swann feels, to give up the dispositional analysis of knowledge.

This conclusion is accepted pro tem. by Jane Roland Martin in her note on this matter. [8] She is prepared to concede Ryle's general point and Hartland Swann's reduction and goes on to distinguish four types of know-how (to which all know-that claims can, in principle, on that analysis, be reduced). Her first category relates to skills; this is Ryle's 'knowing how' and she distinguishes it as being that sort which requires practice to learn. Her second category is knowing how to state particular propositions, and requires no practice. (This seems

to be equivalent to Hartland Swann's new 'knowing how' category, derived from knowing-that). Her third type of knowledge is knowledge of unstated information, as in 'He knows how the accident happened'. Martin's fourth category is of 'knowledge how to behave', and she distinguishes this as a 'tendency' (cf Scheffler's 'propensities' and 'facilities') whereas, she says, the other three are 'capacities'. Broadly speaking, however, she is uncomfortable with the distinction between knowing-how and knowing-that, for

> Because of its simplicity and apparent obviousness, (this) distinction ... has great appeal, but like any dichotomy it gives rise to much controversy and perplexity.

She is also uncomfortable with the simplicity of the reduction proposed by Hartland Swann, for in her view know-how may be differentiated into many different types - at least two of them being of capacities and tendencies. She concludes with the warning that

> it must not be imagined that a classification of all 'know' dispositions will contain only the two categories we have suggested. Indeed, upon further analysis it may turn out that the two categories proposed here must be altered.

There are certainly criticisms to be made against both these accounts of a reduction of know-that to know-how. For one thing, Hartland Swann's notion seems not to take much notice of what seems to be involved in 'knowledge', even in the terms of Ryle's know-how know-that distinction. For the claim to know that X is the case is not merely the assertion of a proposition about X but the claim that the proposition is true, has warrantable assertability, that the claimant has grounds upon which he confidently claims it to be true, and so on. And of these grounds, only justification involves 'knowing how', though this too seems to involve knowing <u>what</u> to do and what counts as success in achieving it. Then again, Roland Martin's second species of know-how is, we remarked, like Hartland Swann's new know-how reduction, and it is subject therefore to the same fatal objection. Her third type - knowledge of unstated information - is, I think, reducible to know-that. For since it does involve <u>information</u> it clearly does consist of propositions that can be unpacked as such - they simply have not yet been made explicit as such, and to say 'I know how the accident happened' is to say 'I know what'. So the distinction of this class of know-how from her second category (to which objection has already been made) seems pleonastic and otiose.

Both these authors' efforts clearly depend upon an assumption that Ryle's thesis is correct. Betty Powell, however, makes a point about knowing that will not fit in with Ryle's position.[9] She questions his equation of intelligent performance with knowing-how and avers instead that the term 'know' should be confined to cases where questions of truth are relevant and where reference to truth is required. In Ryle's terms, then, she wishes to restrict the use of the locution 'know how' to cases where practice is 'the client of theory'. Thus she would distinguish knowing chalk from cheese from telling good from telling bad jokes, on the grounds that the latter is a case where the criteria of difference are not statable; and she would distinguish marksmanship from rainmaking on the grounds that the activities of the agent in the former, though not of the latter, can be judged, in the light of our theoretical knowledge, as being a skill. She thus concludes, as against Ryle and others:

> We can hardly hold that whether or not someone has learned a number of truths is of little importance in settling whether or not he possesses a skill. The difference between knowledge of certain truths and having an ability to do certain things is not so great as we are invited to believe.

For knowledge claims, she maintains, there must be a body of knowledge, with structured concepts, methods of application, and tests of veracity. It is therefore not possible to divorce knowing how from knowing that, since we can only be said to 'know how' to perform a skill if we either know the relevant skill ourselves or there is a relevant theory to be known. On this analysis, then, 'knowing that' is prior; and the theoretical reflections of a Stagg or a Connibear are what make good football and successful rowing conceivable and possible.

Powell's conclusions seem reasonable, though parts of her argument are open to question. Some experts might not agree, for example, that telling jokes (or performing golf swings) is not a client of theory, any more than they would agree with Ryle that Walton fished successfully without any theory or reflection upon what he was doing - although this depends, of course, upon the particular concept of theory being used. We might argue that, at rock bottom, all we do - including our perceiving - is a client of theory in the sense that we bring certain expectations to certain situations and a species of theory of this sort operates in all everyday contexts so as to give them meanings

both in advance of and also after the event. The golfer may not have elaborated his theory into a structured whole, but he nevertheless adjusts his operations in accordance with previous experience and hypothetical judgments. Cognitive considerations enter fundamentally and essentially into such acts of reflection and adjustment. It would indeed be important, in seeking to determine why a golfer used a particular swing in a certain situation, to ask why he did so. In replying he might very probably refer to 'facts' which he had learned either from experience or from others, whether from observation or reading their books. Of course, as Polanyi might remark, this would not amount to a total explanation, but it would be an explanation put forward for assessment and understanding; and it would contain, necessarily, factual knowledge. On this account, then, it begins to look as if both practical and propositional knowledge are equally important in our assessments and attributions of cognitive capacity. For to perform an action intelligently presupposes that the agent knows what he is about and what counts as success in that activity, as well as how best to achieve; while to make a claim to know that something is the case rests upon the tacit acceptance on the part of both parties to the transaction that the claimant knows how to substantiate his claims and the respondent his appraisal of them.

Thus both the view that know-how and know-that are sharply discernible from each other and the view that the one may be reduced to or presupposes the priority of the other begin to seem as simplistic as Roland Martin feared they might be. And that is even when we are willing to accept the terms in which these theses have been framed - for one thing, the analysis of knowledge in dispositional terms, and, for another, the whole idea that knowledge can be analysed at all in this definitive way.

Hartland Swann, it will be remembered, suspected that the only alternative to a reductionist account of knowledge would be to abandon the dispositional account altogether and it is to that account that much critical attention has been directed. It has been objected to on a number of grounds, Geach, for one, maintaining [10] that Ryle's analogy of knowledge as belonging to the same sort of class of entity as glass or sugar is invalid; that, in order to account for what is going on in cases of knowing, one cannot do other than postulate mental 'states' or

'acts' such as 'cognizing' or 'judging'. "There are", Geach's summary states, "episodic acts of judgments, not merely dispositions of a certain sort". D.W. Hamlyn, in addition, [11] criticises any dispositional account of knowledge and belief on the grounds that, in order to be able to state what would count as evidence for the possession of knowledge, one must, to that extent, already in some sense know what it is that one is looking for. For that reason a dispositional account of knowledge clearly involves the same sort of circularity as Plato remarked upon in the Theaetetus. [12] Moreover, the knowledge - whether of fact or procedure - may in any case not necessarily be manifested at all; either the knower might have good reasons for concealing his knowledge, or he may simply know it on a single occasion, after which its expression or demonstration may never again be relevant or called for. In such circumstances, states Hamlyn,

> to invoke the notion of a disposition, or to say that he would ... if ..., would be futile.

Such criticisms seem, then, at the very least to call into question the whole basis of the account proposed by Ryle and adopted by others in which knowledge is explained as a - or a set of - dispositions(s); and, perhaps also, to question the supposed distinction between knowing how and knowing that (on any but the fairly rudimentary level, that is). For Ryle's notion seems to do but scant justice to the complexity of either, and indeed of the whole network of relationships between various types of knowing.

This complexity is well brought out in an example from the realm of sport employed in this connection by H. Entwistle. In an examination of practical and theoretical learning [13] he refers to Ryle's position vis-à-vis the Cartesian 'ghost in the machine' but suggests that several important modifications need to be made to it. He distinguishes, for instance, between complex and simple actions and explicates the characteristics of the former as involving a complex set of operations in which both practical and theoretical activities feature. His examples are drawn from cricket and refer to the overall performances of the batsman and bowler: the latter's success in taking wickets involves his taking into account, as a conscious act of theorising, such disparate factors as the state of the game, the placing of the fielders, the condition of the pitch and the weather, the known strengths

and weaknesses of the batsman, and so on. The class of simple physical activities, such as the actual physical action of bowling, say, a leg-break, is such that, once launched, the delivery can be gone through unreflectively, though as part of the whole complex it is clearly part of a theory, too:

> it is clear that to perform a skill intelligently may be to become involved in a theoretical as well as a practical activity. Bowling an over (or a 'spell' of overs) intelligently is to perform a series of manual operations punctuated by critical evaluations (theorizing) ... In this sense, bowling intelligently is a tandem operation of reflective activity prior to the overt manifestation of the bowling ... followed by the actual delivery of the ball ... This theorizing involves knowing that certain things are the case ...

Thus, to this extent, the sharpness of the distinction postulated by Ryle may be considerably dulled when applied to complex operations or performances, among which are to be found many sporting activities.

Now Polanyi has a notion which seems to provide one of the most searching arguments for maintaining the distinction.[14] This refers to the limits on the actual specifiability of skills, that are such as to render parts of intelligent and skilled performances impervious to critical analysis and incapable even of later specification in any propositional terms. These limits, Polanyi argues, are analogous to the limitations on the specifiability of physiognomies and other similar comprehensive wholes. As an example he instances the pianist's 'touch' (and elsewhere, the skill of the surgeon or the diagnostician). He suggests that, in addition to the limits on specifiability already referred to, any attempt, on the part of the performing agent, even to identify, much less critically analyse, the constituent motions of the skill he was performing would tend to paralyse performance. He maintains that the act of 'integrating' the particular parts of a skill is also unspecifiable: the 'feel' of the pianist's touch, the 'deftness' and dexterity of the surgeon wielding the knife, indeed any such 'knacks', have got to be caught rather than taught. These unspecifiable skills, which are readily discernible if not specifiable, Polanyi refers to as being part of our 'tacit' knowledge.

Entwistle takes up this point of Polanyi's elsewhere[15] and agrees with it, initially. But he suggests that skills involving the problem of timing, of adjustment of pressure etc. by the agent, to meet objective external conditions (Polanyi's 'feel' or 'touch'), are not only

physical; such considerations apply equally well, he believes, to intellectual and professional skills. Some things about a skill cannot be known, of course, until the pupil tries them himself and he agrees that in this sense practice is logically prior to theory. But as far as complex activities such as surgical operations are concerned, his original point still holds: in them theory and practice do clearly function in tandem.

Max Black makes a similar suggestion in an examination of rules and routines in our behaviour.[16] He distinguishes between 'rule-covered' action, in which the agent follows rules of which, as theoretical formulations at any rate, he is unaware; 'rule-invoking action', in which the agent constantly and consciously refers to theory; 'rule-accepting' action, in which the agent, though previously unaware of the theory, is prepared to accept a formulation of the rule that he is already observing tacitly; and 'rule-guided' action, in which the verbal articulation of rules has been replaced by a private non-symbolic structure - i.e., a 'Gestalt', or assimilated knowledge. Black sees the last two as coming between the 'blind, unconscious mastery of rule-covered behaviour and the self-conscious adherence to principles in rule-invoking behaviour'. It is, he suggests, with rule-guided action that we should be particularly concerned in education, in that it is connected with the pupil's 'rendering down' of experience so that it becomes peculiarly 'his' rule as distinct from 'any rule'. It might also be thought that this sort of behaviour represents one of the desired terminal objectives in the teaching and learning of playing games and sports, especially those in which the ability to 'read the game' is at a premium and a prime factor in successful sporting performance.

At the end of this section, then, we may think that, even on the strictest terms, some reservations may be entertained about Ryle's case for the categorization of knowledge as separable into two types of disposition, '-that' and '-how'. For knowledge of propositions depends upon the skill of being able to justify knowledge claims and also, in any case, presupposes familiarity with and ability to use a symbolic system such as language in order to classify and relate experience. Knowing-how, in its turn, appears to depend crucially upon knowledge-that, at least in the sense of knowing what constitutes success in the action; while in the case of complex skills there is a dependence on

knowledge of criteria and on contextual propositional knowledge, which may be explicitly recognised, but which may also be the object of subsidiary awareness as part of the general 'field' or 'Gestalt' of the whole action. To this extent, the distinction between know-how and know-that is obvious and simplistic and takes no account of a whole complex of other considerations which suggest a fundamental connectedness between them.

IV

The criticisms delineated above have had the effect of rendering the Rylean position on knowledge one of considerable dubiety. There is, however, another point to be made which is even more seriously, perhaps even fatally, debilitating to it. What might also be strenuously objected to in the Rylean account of know-how and know-that is the very basis of its methodology - the status and validity of the frameworks within which that distinction is conceived and articulated.

For Ryle's work in this connection is clearly a product of that particular view of philosophy against which Gellner and others have inveighed so passionately [17] and whose declining influence was recently commented upon by The New Statesman in its humorous 'The Clever Men of Oxford'. [18] Ryle's distinction is evidently a function of what may be termed his underlying 'essentialism'. According to this view it is a legitimate task - some would say, the only proper one for the philosopher - to apply the techniques of conceptual analysis to some such term as 'knowledge' in order to 'get straight about' its precise meaning and applicability. In such analyses, concepts and instances are referred to in such terms as 'the paradigm case' and 'parasitic upon'; as 'a family of concepts constituting the idea of' something; of there being a 'real point', or 'the essential point'; of something's 'having to do with one thing' and 'nothing to do at all with' another. The activity of the philosopher thus consists in 'unpacking the concept', or 'mapping the logical geography' of concepts, and so on.

Such expressions are usually symptomatic of the notion that there are 'clearly definable' limits to acceptable meaning; they relate to the idea of 'conceptual correctness', to there being 'necessary and sufficient conditions', [19] to 'central' or 'peripheral' uses, and all

the rest and presume there is some 'essential' meaning to be got at or educed. For any example of this one only has to look at any of a number of textbooks in philosophy of education, for instance, where this approach has been particularly influential, [20] and note the ways in which such concepts as 'play', 'games', 'punishment' and so on, are set out. [21] On this view of things, it is plainly 'incorrect' to speak of the boxer 'taking a great deal of punishment', for example, since the case does not satisfy the proper conditions for 'correct' use of the term - these being something like: 'an offence, an offender, something unpleasant, inflicted by personal agency with a right so to act'. Such, or so it seems to me, is the approach adopted by those who seek to define know-how and know-that in so sharp a way as Ryle.

Of course this is <u>one</u> account of what it is to have a concept, but it is only one. There is at least one other that would deny that there can be such 'separate' canons of correctness, having some sort of independent metaphysical status apart from the language in which they are instantiated, but that avers instead that 'meaning is usage' [22] and that the best we can hope for in attempting to 'get straight about things' in our inter-personal communications or to 'chart' meaning and usage, is to discern a sort of 'family resemblance' only holding between several things insofar as each of them has a reasonable number of some common set of characteristics, though there need be no one thing in the set which they all share in common - and indeed the set itself may not necessarily be clearly delimited. [23] On that view there is simply no point or purpose in seeking to make a clear definition of, or distinction in, knowledge, for to do so is to lay oneself open to all the fallacies of lexical definition; all one can do is see how the word is employed, by whom and in what institutional contexts. The problems, topics and issues concerned, the intentions of the parties to a discussion, the outcomes aimed at, the situations and contexts in which they take place, their antecedents and their consequences - all these, too, give such a concatenation of four letters as k-n-o-w its various meanings and significances. Indeed it is the notion of context which is all important here in understanding human language communication at all, for particular meanings and uses are thoroughly embedded in the particular occasion of their deployment. It is for this reason, as much as any other, that the activities of the linguistic analysts seem to be,

not only founded upon adherence to one particular metaphysic, but also inherently sterile, since they attempt to divorce language from context, analytic from normative and fact from value.

That there are other ways in which we can set about examining the question of the various differences in the ways in which 'know' is used is admirably illustrated in Abraham Edel's account of just this issue.[24] In contradistinction to the 'cut' between know-how and know-that proposed by Ryle, he remarks:

> There are wholly different paths. Aristotle distinguished between knowing-that and knowing-why. His 'that' was differently cut, in that it was limited to the isolated fact as against the explanatory reason ... the difference between 'knowing John' and 'knowing about John' ... might support the sort of distinction Russell made at one time between knowledge by acquaintance and knowledge by description, in which the former involved immediacy of presentation. But it might also support a quite different distinction such as William James made between knowledge of acquaintance and knowledge-about in which the extent of the knowledge is contrasted ... (or) perhaps the significant differences may lie in what is known. Thus there are tremendous differences between 'knowing John' and 'knowing arithmetic' or 'knowing the town', in none of which any preposition or conjunctive adverb intervenes. While a Bergson might elaborate a distinction between outer and inner knowledge (scientific v. metaphysical), a Martin Buber would make the cut between persons and things - thou-knowledge and it-knowledge.

Edel points out the limited applicability of Ryle's model:

> Look at Ryle's examples of know-how: we ride bicycles and play chess and talk French. We do not operate control stations at London airport or break codes or build translation machines

- precisely the sorts of activities whose complexities are explored by Entwistle in his demonstration of the simplicity of the Rylean distinction; and precisely also those belonging to that class of activities of which planning a mountaineering expedition, working out the whole approach to and strategies for a key football match, or even planning for and presenting the Olympic Games also, in my view, are a part.

Our reservations about both the distinction postulated and the method employed by Ryle and, in particular, its applicability to education are aptly summarized by Edel:

> ... the examination of the institutional embodiments of comparable dichotomies, in their social context and historical relations, suggests that the Rylean distinction only holds within the limited domain in which an apprenticeship system is possible ... To make the dichotomy an initial hardened distinction analytically certifiable and coercive on education may be just as much an ideology as Michael Oakshott's attack on reason in politics in his conservative defense of an aristocracy brought up to rule.

And this holds a fortiori for those philosophers of education who accept the distinction and use it as one of the criteria on the basis of which such activities as sports and games are deemed not to be as worthy candidates for inclusion in the class of really 'worthwhile activities' as are such 'theoretical' subjects as history, science and philosophy, of which the curricula of educational institutions ought, it is widely held, to be pre-eminently composed. [25]

V

In one important sense, of course, there is tremendous value in Ryle's work on this particular issue. For it is clear enough that he is concerned to mount an attack on, inter alia, the idea of the supposed 'unitariness' of knowledge, and the view that every intelligent action is one preceded by ratiocination and that the only available candidate for knowledge ascriptions is that of a theoretical kind. Ryle's own Fragestellung on these issues has not, perhaps, received the credit due to its attempt to make explicit the distinct senses and ways in which we use the word 'know'. The objections to his stated position are, as stated, the ossification of the Rylean distinction by certain philosophers of education, which has so acted as to militate against physical education activities in schools, colleges and universities; and - much more importantly - the fact that there are many different sorts of 'cut' that could be made in the concept of knowledge.

That the latter is the case comes out, not only from Edel's masterly summary - there is another such exploration in the work of Hamlyn [26] - but also from Wittgenstein's memoranda on the various sorts of moves we can make with this word: [27]

> One has already to know (or be able to do) something in order to be capable of asking a thing's name ... (30) ... What does it mean to know what a game is? ... Isn't my knowledge, my concept of a game, completely expressed in the explanations that I could give? That is, in my describing various examples of game; shewing how all sorts of other games can be constructed on the analogy of these; saying that I should scarcely include this or this among games; and so on. (75) ... The grammar of the word 'knows' is evidently closely related to that of 'can', 'is able to'. But also closely related to that of 'understands' ('Mastery' of a technique) (150). But there is also this use of the word 'to know' : we say 'Now I know!' (151) ... (184) What was it like suddenly to know it? Surely it can't have occurred to me in its entirety in that moment! ... (179) Think how we learn to use the expressions 'Now I know how to go on', 'Now I can go on' and others; in what family of language-games we learn their use.

This is Wittgenstein's point: that 'know' words simply belong to one of those family resemblances referred to above, and to use it correctly implies being able to recognise the various different circumstances in which its various 'meanings' fit. As Wittgenstein points out elsewhere:

> What is happening now has significance - in these surroundings. The surroundings give it its importance. (583)

And it is the various contexts in which we use 'know' that help us to see how many 'cuts' can be made in the whole idea of 'knowing'. Wittgenstein does, of course, elsewhere make the important point that where there is no possibility of being wrong it is pointless to speak of knowledge,[28] and the efforts of generations of epistemologists have been to investigate the grounds on which knowledge claims may be given all reasonable credence, so that they may be accredited as part of our shared world of interpersonal agreements that give us such objectivity as we have.

This indeed is where Popper has made a profound contribution to epistemology, for he has suggested a redefinition of the principal problem with which it is supposed to deal.[29] The various cognitive repertoires of individuals and their 'know' claims are relevant to 'knowledge' but they do not of themselves constitute its bounds: subjective epistemology does not, he argues, account for the growth and development of our knowledge nor for scientific discovery. Popper advances devastating criticisms against subjectivist and empiricist epistemology with particular respect to observation and induction. All

observations, he holds, involve a theory, an explanation; there is no such thing as a cold, passive, neutral perception. Observations are active affairs in which theorising is deeply embedded. In other words, there is no non-presumptive knowledge. Popper also argues that the process of 'induction', understood as the production of general or universal statements from sets of instances, is 'irrational' and no part of science. Science, he maintains, proceeds from conjectures and guesses which we try to eliminate or confirm with various types of test: we test our theories, or hypotheses, against basic, or test, statements which we have conventionally agreed to adopt between ourselves as operating criteria. Beliefs or theories that are falsified by this method are either rejected or amended; theories that are not so falsified are retained, tentatively and provisionally. This hypothetico-deductive methodology accounts for the growth and development of all human knowledge in its various forms. It provides a logically coherent account of the ways in which gains in all the various fields were made, which is subject to no such empirical/psychological considerations as those with which traditional subjectivist epistemology is overwhelmingly pre-occupied; and it is pre-eminently 'rational' in the sense that its theories - or 'know' claims - can be assessed and evaluated without reference to any subjective conditions in any individual knower.

The 'objectivist' approach advocated by Popper stands fundamentally for the development of a critical, questioning attitude; for him, every knowledge claim, in whatever realm, is a hypothesis to be tested and, if possible, knocked down. But this also, in my view, necessitates that the questioner and would-be falsifier knows what counts as an appropriate test - or even what testing is - what may or will work as a device of refutation, what constitutes successful falsification in each of the various fields in which hypotheses are advanced and stand ready to be tested. As Aristotle remarked: [30]

> It is the mark of the educated mind to expect that amount of exactness in each kind of which each kind permits.

And that involves knowing what the various kinds of claim in the whole cognitive realm look like, rest upon, and originate in; and what will count as a peculiar falsifying device in their several cases. To this extent, even the distinction between the 'strong' and 'weak' senses of

know suggested by Malcolm [31] stands in need of the further specification with respect to 'kinds' suggested above. It is not merely sufficient that, as Scheffler asserts, [32] in considering whether or not someone's claim to know rests upon adequate evidence,

> we are judging that he has an evidential argument which he understands. In saying he knows, we are not merely ascribing true belief but asserting that he has proper credentials for such belief, the force of which he himself appreciates;

it is also crucial that the credentials are of the appropriate type, that the knowledge has been subject to the rigour of the relevant test criteria. What these tests might be is not being assumed in any a priori sort of way, for they will be a function of the circumstances, the discourse, in a word, of the various 'forms of life', within which they have their agreed use and meaning.

This important point is ably spelled out by J.P. Powell. [33] For him such critical procedures in the cognitive realm

> are flavoured by the field of discourse in which they are employed and out of which they have developed. ... What distinguishes various types of discourse is their flavour and by this I mean the circumstances in which disputes arise, the kind of evidence which is relevant, the stratagems which are permissible and the considerations which make certain moves decisive. In order to discover the character of any form of discourse one needs to get the feel of it, to become so familiar with the terrain that one can move confidently over it and follow the arguments of others with ease ... If this brief account of the matter is broadly correct then these skills which are intimately connected with the fields in which they are learnt and exercised are unlikely to be generalisable.

In other words, the various procedures that typify different fields of discourse - Powell refers to the 'legal, moral, mathematical or political' as examples of such 'fields' - are irreducibly context-bound and field-dependent. Just as there can only be certain sorts of creativity and 'understanding', so there can only be certain sorts of knowledge-that and -how, and these are characteristically determined by the contexts in which they are exercised and the highly heterogeneous nature of the terminal outcomes at which they aim. The idea of know-how or know-that - even if they are separable at all, that is - has to be considerably modified by considerations arising from the radically discrete nature of human cognition, discourse, experience and the development of mind. [34]

On this basis I venture to hazard the tentative hypothesis that, although 'knowledge' words clearly have different methods of, and grounds for, giving their various claims warrantable assertability in the various fields in which they are made, to say so much is not to say that 'knowledge' can be sharply differentiated into 'propositional' and 'procedural' - except, of course, at a very rudimentary level; nor, for that matter, that 'knowledge' is something that must be restricted to cognitions of an analytically 'true' or synthetically 'verifiable' kind; nor even that it must remain discursive only. As Louis Arnaud Reid points out,[35] the range of general use of 'know' words is much richer and wider than the verificationist *elenchus* would allow:

> We say we 'know' in sense-perception (long before the use of words), and through feeling; we 'know' a poem or a fugue; we 'know' other persons - acquaintances, friends, lovers; we 'know' good and bad, right and wrong; we may even claim to have some sort of 'knowledge' of God. ... in every kind of knowledge and experience - sense-perception, science, art, myth, religion, personal encounter - symbols and signs are involved, each overlapping field having a kind of 'logos' of its own.

Elsewhere,[36] in talking of aesthetic appraisals as a 'way of knowing', he maintains that feeling is a 'form of knowledge' - "feeling is cognitive and is positively essential to discriminating aesthetic perception of the art-object" (for example). The notion of the severe limits placed on 'knowledge' by some philosophers he describes as a

> cultural *idée fixe* - which one dictionary describes as 'intellectual monomania'.

(A similar obloquy might be made against the idea that one can look for some one 'thing', concept or 'essence' of knowledge, for which such variously necessary and/or sufficient conditions as 'justified true belief' or 'relatively routinisable competences' and 'open-ended critical skills' can be identified).

On this basis we can legitimately question some of the utterances made in certain quarters that deny the existence of any other modes of cognition than the analytic or the synthetic, - in particular, the aesthetic and the metaphysical. For these are clearly among the ways in which people actually do cognize and make meaningful communication within the various 'universes of discourse' that constitutes their shared worlds.

It is this that explains why, to make a paraphrase of another saying, knowing is a passionate business. For, in some sense, as against Popper, the human person is central in all acts of cognition. As Polanyi says: [37]

> Skilful knowing and doing is performed by subordinating a set of particulars, as clues or tools, to the shaping of a skilful achievement, whether practical or theoretical. We may then be said to become 'subsidiarily aware' of these particulars within our 'focal awareness' of the coherent entity that we achieve. Clues and tools are things used as such and not observed in themselves. They are made to function as extensions of our bodily equipment and this involves a certain change of our own being ... Such is the <u>personal participation</u> of the knower in all acts of understanding.

Thus knowledge is not neutral or in any sense 'out there'. We do better to speak of 'knowing' in all its various aspects, meanings and usages, such as the aesthetic, the personal, the transcendent and all the rest, as the realms of communication - indeed as the only acceptable reality - by means of which persons are enabled to construct and share a world. For what is common to all acts of knowing and experiencing is that they are <u>propria</u> of persons. As Arnaud Reid puts it:

> ... no summation of statements, however complete, ever adds up to knowledge. Knowledge is possessed only by the living mind, which becomes illuminated through its various efforts and experiences of articulation. The mind is able to re-experience with more discriminating insight because of these efforts and experiences.

All the 'ways of knowing' that there are, are functions of mind, conceived and articulated in interpersonal discourse.

VI

There is nothing dualistic about this. To say so much is not to intimate anything 'ghostly' about the nature of 'mind', nor to assume that there is the separation between mind and body that some proponents <u>and</u> critics of physical education activities appear to accept and believe in. To imply so much would be to expose physical education to all the hazards which many of the views put forward as solutions to the supposed 'Mind-Body' problem have encountered. But neither do I wish to go so far as Ryle, who asserted that [38]

> though it is not always convenient to avoid the practice, there is a considerable logical hazard in using the nouns 'mind' or 'minds' at all.

For this view too is open to all the objections which Geach and others marshalled against it.

A much more coherent view on this matter is, in my opinion, that proposed by P.F. Strawson.[39] His case, it will be recalled, is that there is no such problem, for to think that there is betokens a failure to appreciate the crucial function, in this respect, of a concept which he describes as 'logically primitive' - that of 'the person'. The idea of the person is the touchstone of all our appraisals of the world, for it is one of the basic presuppositions of our making sense of the world at all. The idea of 'person' precedes the idea of mind and body: a person is both, for both these ideas are subsumed in that of the person, which is prior. A person is body insofar as he has M-predicates - spatial extension, height, weight, colour, resistance etc. - but is not body insofar as he has those predicates which are the differentia of the class of persons (P-predicates) such as actions, volitions, emotions, deliberations - "'is smiling', 'is going for a walk', as well as things like 'is in pain', 'is thinking hard', 'believes in God' and so on". These are all things that are characteristic of our 'minds' and they are objective in the sense that we see them but do not experience them in the case of others and we experience them but do not see them in the case of ourselves. These sorts of postulates are built in to the ways in which we recognise other members of the class, for we operate not only on the assumption but on the presupposition of our common possession of the propria of personhood - language, thought and mind.[40]

Now to have a mind implies entering into and being able to operate within the various sorts of conceptual scheme by which mankind has progressively classified and refined his experience of what he takes to be his world. As P.H. Hirst remarks[41]

> The various manifestations of consciousness, in, for instance, different sense perceptions, different emotions, or different elements of intellectual understanding, are intelligible only by virtue of the conceptual apparatus by which they are articulated.

The progressively structured, refined and complex acts of cognition by which man has characteristically differentiated his experiencings and consciousness are a function of the particular capacities for thought and language by means of which man has given objectivity and stability to the world he shares with others he recognises as like him. For

> whatever private forms of awareness there may be, it is by means of symbols, particularly in language, that conceptual articulation becomes objectified, for the symbols give public embodiment to the concepts.

Such acts of cognition are externalised, then, in man's symbolic codes of communication - not always necessarily discursive - of a complex and heterogeneous kind. Such are the 'ways of knowing', or the various forms of 'knowledge'. And these are

> the basic articulations whereby the whole of experience has become intelligible to man, they are the fundamental achievement of mind.

That there are such differentiations in man's various conceptual schemata, the ways in which he sees and constructs the world, the various modes of address employed between one man and another to locate his experiences and give them meaning and significance, is a conclusion common to all who enquire into the nature of cognition and human rationality.[42] But what is also common is that not only are such discrete forms of rationality and the various sorts of conceptual scheme within which they are instantiated a complex matrix of skills and propositions, but that what gives each 'form' its sui generis character is that each of these skills and its propositions are peculiar in character to the form - are, as Powell noted, highly context-bound and field dependent.

The picture is even more complicated by the further consideration relating to connections between the forms and the complexity of their interrelationships and dependencies, such as that, for example, between, say, the physical sciences and mathematics, or between the arts and what we might call knowledge and understanding of other persons. Indeed the ways in which 'forms' differ from and are related to each other are by no means clear - are in fact the subject of considerable controversy. There is so much dispute concerning the nature of the disciplines and their defining criteria (if any) that the very idea of a 'discipline'

might also be regarded as an example of what W.B. Gallie has called an 'essentially contested concept'.[43] Philosophy itself is certainly a good case in point - is it procedural or substantive; analytical or metaphysical; descriptive or revisionary? And what about physical education? Is it a 'form' or a 'field' of knowledge - mono-disciplinary, multi-disciplinary or cross-disciplinary?

All these issues remain to be resolved. It is basic to the idea of 'essentially contested concepts' that there is continual discussion and debate about their status and applicability; hypotheses are continually being put up and as frequently knocked down, and such dynamism is wholly typical of the cognitive realm. For without it the mind of man would stagnate and atrophy; one only has to note the blurring of distinctions in language - as, for instance, that between 'disinterested' and 'uninterested', or 'disinterested' and 'impartial' - to see how easily we lose concepts and how lack of the sort of sharpness that characterizes our probings at the foundations of our disciplines and the frontiers of our knowledge can impoverish our language, and with that our thought and our world.

Certainly philosophers of sport and physical education are aware of this danger and are as impressed with the need for precision and clarity in their examination of the particular natures and objectives of the various forms of human activity into which they are enquiring. An example of this sort of concern can be found in the work of a distinguished Officer of this Society, Professor Earle F. Zeigler. In a paper presented in Canada in 1972[44] he examined the question of the nature of physical education and was inclined to view it as compound of elements "containing arts and social science aspects and bio-science aspects" giving the definition of the discipline as: "the study of human motor performance in sport, dance, play, and exercise". To this conclusion was appended a whole series of models showing just how complex the analysis of physical education as whatever sort of entity it is could become. Professor Zeigler's account explored the relationship between physical education and a whole range of other types of cognition of an astonishing breadth and complexity, from Fine Arts through Philosophy to Mathematics. But his most important point is that

> The composition of the physical education discipline will in all probability be an 'evolving entity' over the years.

It is, on that score, just as suitable a candidate for creative scholarly enquiry, leading to the sort of 'objective' knowledge status which Popper accords to what he calls the 'third world' of knowledge, as any of the other, equally complex, forms of knowledge and awareness.

As a contribution to that enquiry I should like to venture the hypothesis that 'knowledge' relative to human movements and activities encapsulates and presents, in a focussed form, modes of perception, reflection, action, experience and communication that are at least as important in human development and the emergence of persons as other generally more highly prized forms of knowledge, such as those elevated by philosophers of education such as R.S. Peters and others in their so-called 'transcendental deduction' of worthwhile activities, from which many of the interests of physical educationists, including sport and games, are to be excluded as being 'not serious'. For, on my account, a 'person' subsumes both intellectual and physical elements in his development and both of these are centrally involved in his experience and awareness of the world. On this basis, it seems to me, Human Movement Studies must have a place on the curricula of educational institutions; for without experience of and instruction in the various modes of being and cognizing of which they are pre-eminently constituted, no 'knowledge' of them and these constituents is, in any extended sense, possible [45] and, to that extent, the knowledge of the individual remains impoverished.

To say what such modes of cognition are, however, involves considerations far more complex than those that are so easily connoted in a distinction that is as simplistic as it is platitudinous - that between know-how and know-that. For physical education would seem to require knowledge of a mathematical, scientific, interpersonal, historical, political, aesthetic and ethical kind, at the least, with all the peculiar sets of propositions, modes of procedure and tests for truth, relevance and appropriateness that are associated with each of these ways of knowing. In other words, Physical Education seems to me, at any rate, to be what might be termed a 'field' of knowledge, which draws upon the insights available from a wide range of discrete

disciplines in order to formulate answers to problems of both a theoretical and practical kind arising from the one central feature that draws its concerns together and gives them coherence. And that is the way in which the human person can develop his understanding and enrich his life through the medium of that part of himself by means of which his existence is objectified - the body.

This is only a hypothesis, however, relating to a subject of a highly complex character. It is, as any other such, open to examination and refutation and clearly this Society is a body amply equipped to falsify it. My point is that that is a task to which sport philosophers and philosophers of physical education ought to come without those sorts of preconceptions and pre-occupations that seem to figure in the works of those who have rested their rebuttals of physical education on a distinction that seems to me to be vacuous, simplistic or fallacious.

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19 Cf. J. Hospers, Introduction to Philosophical Analysis, Englewood Cliffs N.J., (Prentice-Hall Inc.), 1953; London, (Routledge & Kegan Paul), 1956 - on 'definition' and 'necessary' and 'sufficient'.

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> ... is a philosopher who embarks on such a task committed to the suspect conviction shared by Socrates that there is some 'essence' of education which conceptual analysis can explicate? In suggesting that teachers may be affected by a conceptual blight if they pay too much attention to economists, sociologists and psychologists, have I already put my foot on the primrose path that leads to essentialism? Frankly I do not much mind if I have.

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40 I am aware that there are objections to this view. Cf. for example those put forward by Bernard Williams in his collection Problems of the Self, Cambridge, (Cambridge University Press), 1973, especially: 5 'Are Persons Bodies?' (from The Philosophy of the Body, ed. Spicker, Chicago, (Quadrant Books), 1970); and 7 'Strawson on Individuals' (from Philosophy, XXXVI, 1961).

41 P.H. Hirst, 'Liberal Education and the Nature of Knowledge' in R.D. Archambault, (1965), op. cit., p. 123. Cf. Jonathan Bennet, (1964), op. cit., p. 44.

42 Apart from L. Arnaud Reid, (op. cit., n 35 sup.) and W.P. Montague, Ways of Knowing, London, (Allen & Unwin), 1925, cf. the more recent work in this connection by Hirst, P.H. Phenix, Realms of Meaning, New York, (McGraw-Hill), 1964; Phenix, 'The Architectonics of Knowledge' in Education and the Structure of Knowledge, ed. Stanley Elam, Chicago, (Rand McNally), 1964; J.T. Tykociner, 'Zetetics and Areas of Knowledge' in Elam, (1964), op. cit.; and J.J. Schwab, 'Problems Topics and Issues', ibid.; and Schwab, 'Structure of the Disciplines: Meanings and Significances' in The Structure of Knowledge and the Curriculum, eds. G.W. Ford and Lawrence Pugno, Chicago, (Rand McNally), 1964.

43 W.B. Gallie, 'Essentially Contested Concepts' in Aristotelian Society Proceedings, Vol. LVI, 1955-6. Also W.B. Gallie, Philosophy and the Historical Understanding, London, (Chatto & Windus), 1964, Ch. 8. Cf. his 'Art as Essentially Contested Concept', Philosophical Quarterly, Vol. VI, 1956.

44 Earle F. Zeigler, 'A Model for Optimum Professional Development in a Field Called "X"' - a paper presented to the First Canadian Symposium on The Philosophy of Sport and Physical Activity, University of Windsor, Windsor, Ontario, May 1972.

45 Here I am arguing against the thesis of J.P. White in his Towards a Compulsory Curriculum, London, (Routledge & Kegan Paul), 1973. White distinguishes between what he calls 'Category I' activities (such as speaking one's own mother-tongue, doing pure mathematics, the physical sciences, appreciating works of art, and philosophizing) of and in which no understanding is logically possible without engaging in them; and 'Category II' activities (such as speaking a foreign language, playing games, doing cookery, painting pictures or composing or performing music) in the cases of which some understanding of the activity is logically possible without engaging in it. He argues that only 'Category I' activities must be included on the curriculum of educational institutions, the rest being available on an optional basis only.

I am in some doubt as to whether this thesis will really hold in the case of the first two and the last of his 'Category II' activities. Music, for example, is a symbolic code of a non-discursive kind in which quite specific meanings are embodied and can only be understood 'from the inside', so to speak. While with the characteristic form and 'flavour' of a foreign language goes a whole new culture and form of life: 'Die Grenzen meiner Sprache bedeuten die Grenzen meiner Welt', as Wittgenstein put it (Tractatus Logico-Philosophicus 5.6). And I am extremely dubious whether one can know about, experience and savour the satisfactions and excitements of the perfectly-executed cover-drive, the brilliantly-scored touchdown and the record-breaking row, in any sense, 'from the outside'.